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[GB/GB]; 11 Whickham Lodge Rise, Whickham, New-
castle-upon-Tyne NE16 4RY (GB).

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(74) Agents: **CARPENTER, David et al.**; Marks & Clerk,
Alpha Tower, Suffolk Street Queensway, Birmingham B1
1TT (GB).

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(71) Applicant (*for all designated States except US*): **THER-
MODYNAMIX THERMOFORMING SPECIALIST
SERVICES LIMITED** [GB/GB]; 3 Princes Park, Team
Valley Trading Estate, Gateshead, Tyne & Wear NE11
0NF (GB).

(72) Inventor; and

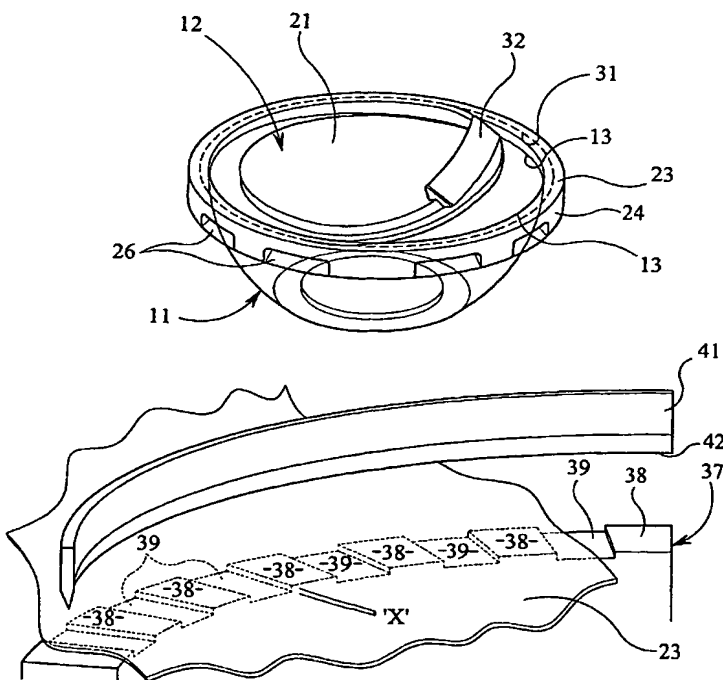
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(75) Inventor/Applicant (*for US only*): **REED, Harry**

— with international search report

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(54) Title: TAMPER-EVIDENT CONTAINER



(57) Abstract: A container comprising a bowl (11), and a lid (12) for closing the bowl, the periphery of the bowl and the lid being arranged to be non-releasably interconnected, and, said lid or said bowl having a frangible boundary region (31) adjacent to its periphery, whereby at least a major portion of the lid (12) can be detached from the periphery of the container to open the container. There is also disclosed a method of producing a frangible boundary region (31) in a container lid (12), and an apparatus for performing the method, the method comprising supporting that region of the lid which is to contain the frangible boundary, on an anvil (37) the surface of which has a plurality of spaced recesses (39), and cutting said material by means of a blade (41) having a planar edge (42) parallel to the plane of the top surface of said anvil so that the blade cuts through the lid material completely where the lid material is supported on the anvil, and the material of the lid aligned with said recesses is flexed into said recesses by the blade, the depth of said recesses below the top surface of the anvil being less than the thickness of the lid material so that the lid material above said recesses is cut into and so thinned, but is not cut completely through, by said blade.



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INTERNATIONAL SEARCH REPORT

International Application No

PCT/GB 03/04835

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 B65D17/28 B65D43/02 B65D17/16 B26F1/18

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 95/06600 A (PROCTER AND GAMBLE) 9 March 1995 (1995-03-09) page 5, line 5 - page 7, line 38; figures 1-5	1-8, 11-13,18
X	EP 1 160 171 A (DOLPHIN PACKAGING) 5 December 2001 (2001-12-05) column 5, line 45 - column 6, line 13; figures 8-13	1-8,11, 18
X	EP 0 055 007 A (NIGU-PACK) 30 June 1982 (1982-06-30) page 5, line 12 - page 9, line 27; figures 1-7	1-3,8, 11,18
	-/-	

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Rabolini, M

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	DE 86 13 634 U (PIBER GROUP) 3 July 1986 (1986-07-03) page 2, line 18 - page 4, line 32; figures 1-6	1-3,8, 11,18
X	US 4 702 387 A (WOMBOLD) 27 October 1987 (1987-10-27) column 3, line 36 - column 4, line 54; figures 1-5	1-3,8,18
A	EP 1 013 562 A (SHEPPARD) 28 June 2000 (2000-06-28)	
A	EP 0 875 370 A (SHOWA DENKO PRODUCTS) 4 November 1998 (1998-11-04)	
A	FR 2 395 200 A (SNBP) 19 January 1979 (1979-01-19)	
A	US 5 809 860 A (HAASER JAMES DUDLEY) 22 September 1998 (1998-09-22) figures 7,8	19,22

INTERNATIONAL SEARCH REPORT

International application No.
PCT/GB 03/04835

Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☒ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

INTERNATIONAL SEARCH REPORT

International Application No. PCT/ GB 03 /04835

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-18

Container comprising a bowl and a lid, whereby their peripheries are non-releasably interconnected and whereby a major part of the lid can be detached from the periphery of the container.

2. claims: 19-23

Method of producing a frangible region in a container and apparatus therefor.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/GB 03/04835

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
WO 9506600	A	09-03-1995	AU 7601794 A CA 2170590 A1 WO 9506600 A1 US 5511680 A	22-03-1995 09-03-1995 09-03-1995 30-04-1996
EP 1160171	A	05-12-2001	AU 4803801 A CA 2348339 A1 EP 1160171 A2 NZ 511879 A US 2002003142 A1 GB 2363114 A	29-11-2001 26-11-2001 05-12-2001 28-02-2003 10-01-2002 12-12-2001
EP 0055007	A	30-06-1982	DK 549180 A AT 20719 T AU 547413 B2 AU 7933282 A BR 8108929 A DE 3174946 D1 DE 8138577 U1 WO 8202183 A1 EP 0055007 A1 FI 822846 A JP 57502118 T NO 822844 A NZ 199345 A US 4453646 A ZA 8108796 A	24-06-1982 15-08-1986 17-10-1985 20-07-1982 30-11-1982 21-08-1986 05-04-1984 08-07-1982 30-06-1982 16-08-1982 02-12-1982 20-08-1982 13-12-1985 12-06-1984 24-11-1982
DE 8613634	U	03-07-1986	IT 207083 Z2 DE 8613634 U1	23-11-1987 03-07-1986
US 4702387	A	27-10-1987	NONE	
EP 1013562	A	28-06-2000	EP 1013562 A2	28-06-2000
EP 0875370	A	04-11-1998	JP 10305871 A AT 207009 T DE 69802032 D1 DE 69802032 T2 EP 0875370 A2	17-11-1998 15-11-2001 22-11-2001 06-06-2002 04-11-1998
FR 2395200	A	19-01-1979	FR 2395200 A1	19-01-1979
US 5809860	A	22-09-1998	AT 187945 T AU 3614495 A CA 2202492 A1 CN 1160385 A ,B DE 69514114 D1 DE 69514114 T2 EP 0784575 A1 ES 2139940 T3 WO 9611856 A1 ZA 9508573 A	15-01-2000 06-05-1996 25-04-1996 24-09-1997 27-01-2000 20-04-2000 23-07-1997 16-02-2000 25-04-1996 13-05-1996